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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,938	11/21/2003	Steven R. Sedlmayr	AUO1013	3584

7590 01/17/2006

Law Office of Roxana H. Yang
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EXAMINER	
FINEMAN, LEE A	

ART UNIT	PAPER NUMBER
2872	

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/718,938	SEDLMAYR, STEVEN R.
	Examiner	Art Unit
	Lee Fineman	2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *129-131* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *129-131* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 September 2005 has been entered in which claims 129-131 were amended. Claims 129-131 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 129-131 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa et al., US 5,200,843 in view of Konno et al., US 4,497,015.

Karasawa et al. disclose a system (fig. 13) or method for displaying a color image projected from a liquid crystal device (fig. 13) which includes means for a first liquid crystal light valve (8G), a second liquid crystal light valve (8B) and a third liquid crystal light valve (8R), comprising [a] means (1) for producing a collimated primary beam of light having a predetermined range of wavelengths, randomly changing orientations of a chosen component of electric field vectors; [b] means (44) for converting the randomly

changing orientations of said primary beam of light to having substantially the same selected predetermined orientation of a chosen component of the electric field vectors; [c] means (45) for separating the primary beam of light into two or more primary color beams of light, each of the primary color beams having the same selected predetermined orientation of a chosen component of electric field vectors (from 44, column 1, lines 17-21) as that of the other primary color beams; [d] means (46) for forming the optical light paths between the light source (1) and the three liquid crystal light valves (8G, 8B, 8R) which are unequal in length and based on luminous intensity of the primary colors associated with respective light valve produced by the light source (fig. 13); [e] means (8G, 8B, 8R) for altering the selected predetermined orientation of the chosen component of the electric field vectors of a plurality of portions of each of the separate primary color beams of light by passing each of the separate primary color beams of light through a respective one of the liquid crystal light valves in a single direction (fig. 13) whereby the selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate primary color beams of light is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as each of the separate primary color beams of light passes through the respective one of the liquid crystal light valves altering the selected predetermined orientation of the chosen component of the electric field vectors (column 1, lines 31-33); [f] means (47) for combining the altered separate primary color beams of light into a single collinear beam of light without substantially changing the altered selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each of the separate beams of light; [g] means (48) for

resolving; and [h] means (49) for passing at least one of the resolved beams (S) to a projection means (13), the projection means receiving only light having substantially the same selected predetermined orientation of the chosen component of the electric field vectors (S). Karasawa et al. disclose the claimed invention except for the collimated primary beam having a substantially uniform flux intensity substantially across the initial beam of light and a rectangular cross sectional area; having [b] means converting the primary beam of light to substantially the same selected predetermined orientation of a chosen component of the electric field vectors without discarding half of the light; and having [g] means for resolving from the single collinear beam a first resolved beam having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electromagnetic wave field vectors are different from one another. However Karasawa et al. also teaches that when using a polarizing beam splitter like element 2 (which resolves from the single collinear beam of electromagnetic energy/light a first resolved beam of electromagnetic energy/light having substantially a first selected predetermined orientation of a chosen component of electromagnetic wave field vectors and a second resolved beam of electromagnetic energy/light having substantially a second selected predetermined orientation of a chosen component of electromagnetic wave field vectors, whereby the first and second selected predetermined orientation of the chosen component of the electromagnetic wave field vectors are different from one another, see figs. 2 and 3), an absorption type polarizer like 14 is not

required (see column 5, lines 49-52) and that absorption type polarizers generate higher temperatures which can cause stability problems in the system (see column 1, lines 54-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the analyzing absorption type polarizer (48) with a polarizing beam splitter to further reduce the heat in the system. Karasawa et al. also teaches in figs. 1 and 5, an alternative means (3) for converting the randomly changing orientations of said primary beam of light to having substantially the same selected predetermined orientation of a chosen component of the electric field vectors without discarding half the light (see fig. 5) and further not requiring an absorption type polarizer like 44 as detailed above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the analyzing absorption type polarizer (44) with polarization converting means (3) to further reduce the heat in the system, which would also prevent discarding half the light. Finally, Konno et al. disclose a light illumination device (fig, 5) which produces a primary beam (at M) which is collimated and has a substantially uniform flux intensity substantially across the initial beam of light (column 5, lines 43-52) and has a rectangular cross sectional area (using lens element 102, fig. 3; column 3, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the light source of Karasawa et al. with that of Konno et al. to have a more uniform intensity light beam and provide a more consistent image. The method of utilizing the structure of the claim is inherent therein.

Response to Arguments

3. Applicant's arguments with respect to claims 129-131 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LAF
January 12, 2006

MARK A. ROBINSON
PRIMARY EXAMINER